

REMARKS

Claims 1-5, 8-16, 21-26, 29-31, 35-38, 40-42, 46-50, 52, 56 and 57 are pending and presented for examination. Claims 1, 24, 35, and 46 are independent claims. Claims 6-7, 28-29, 32-34, 39, 43-45, 51, and 53-55 were previously canceled, and claims 58-61 were previously withdrawn. Claims 1-5, 8-16, 21-26, 29-31, 35-38, 40-42, 46-50, 52, 56 and 57 are rejected. Applicant traverses these rejections and respectfully requests reconsideration of the rejected claims in light of following remarks.

Interview Summary

Applicants thank the Examiner for the interview held on May 19, 2008, during which the current rejections and cited references were discussed in general in relation to the previous office action. No agreement was reached with respect to the claims during the interview.

Claim Rejections Under 35 U.S.C. §103

1. Claims 1-3, 8-16, 23-25, 30, 31, 46-48, 52, 56 and 57 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent 7,048,984 to Seth et al. ("Seth")

Seth discloses an extrusion formed reticulated netting having reticulated hook fasteners. The netting includes two sets of strands at angles to each other. The netting is formed by a cut and stretch method entailing extruding a base layer having spaced ridges (e.g., hooks or ridges with hook cross-sectional shapes) which are cut at spaced locations. The base layer is then stretched in the direction of the ridges to space apart the cut portions to provide hooks.

Regarding claims 1, 24 and 46, the core contention upon which the rejection is based is that it would have been obvious to change the size of the fastener disclosed in Seth to achieve a fastener having a head with an overall height that is greater than 55 percent of an overall height of the fastener element, and a ratio of an overall height of the crook to an entrance height that is greater than 0.6, because Seth discloses a hook having a hook height of 556 μm and a hook droop of 292 μm , which is 52.5% of the hook height. The Examiner cites In re Rose for the

proposition that the change in fastener size would merely be a design consideration within the skill of the art. Applicant respectfully disagrees.

Applicant's claims are not about size, but about *ratios* of dimensions; and while it may be true that changing an overall *size* of a device is generally held to be within ordinary skill absent special considerations, it is not true that any advance in the art based on a new realization of the importance of particular and previously unrecognized relationships of dimensions is not obvious under the doctrine of In re Rose. In Ex Parte Buchanan (Appeal No. 2000-0522, 2000 WL 33301735 B.P.A.I. 2000), for example, the Examiner rejected claims to a package convertible into a serving bowl, which recited sides of no less than twice the width of the bottom of the package. There, the claimed relationship between two recited variables was not found in the prior art, but the examiner rejected the claims under §103, citing In re Rose and concluding that a mere change in the height of the walls would have been obvious. The Board reversed the rejection, finding that "the modification suggested by the Examiner to meet the claimed ratio would involve modification of one dimension relative to another," namely, the walls to the bottom, and that the Examiner could not supply the missing characteristic by characterizing it as mere design choice. The Board also noted that the relationship or ratio between the recited two variables was not arbitrary; rather, as is the case here, was discovered to solve a stated problem.

Applicant's touch fastener components have good peel resistance and other performance characteristics, especially when mated with loop materials having open structures, such as those loop materials having a relatively low pile height to filament diameter ratio. The particular combinations of key ratios recited in Applicant's independent claims are not arbitrary, but have been found by Applicant to help enable closures with performance characteristics more typical of woven hook products than molded hook products, but at a much lower overall profile, for reasons that become clear to those of ordinary skill in this art upon reading Applicant's disclosure.

The Examiner argues that Seth "almost meets" the claim limitation that "the head has an overall height, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the head, that is *greater than 55 percent* of an overall height of the

fastener element, measured perpendicular to the sheet-form base” (emphasis added), and that a person of ordinary skill in the art will acknowledge that only a small increase is required to meet the claim limitation. Applicant respectfully submits that this argument exhibits the use of an inappropriate standard for determining obviousness. The proper standard for obvious is not concerned with the absolute value of a distinguishing characteristic, but whether it would have been obvious to have modified the prior art to obtain the claimed invention.

The silence of the office action as to *why* someone of mere ordinary skill would even attempt such a modification of Seth’s fastener element is understandable, as there is no apparent purpose for such a modification. Seth discloses, in Table 1, four specific example sets of dimensions for fasteners elements of hook netting producible by the method disclosed therein that exhibit his desired characteristics of being breathable and dimensionally stable (see Col. 5, Line 50 to Col. 6, Line 9). Seth also discloses favorable performance characteristics achieved by his hook netting, in terms of peel force and dynamic shear (see Col. 6, Lines 13 to Col. 7, Line 16). Seth fails to suggest any reason to modify the disclosed dimensions to achieve the structural relationship recited in Applicant’s claim 1.

The argument that the claimed ratio could have been obtained by modifying the head height of Seth’s product while keeping the other dimensions constant is also inappropriate to a proper obviousness analysis. Simply put, there is nothing about Seth that would provide any reason for the proposed modification of one dimension while keeping the others constant, so as to skew the relative sizes of various features of Seth’s fastener element to result in something within Applicant’s claims.

The Examiner has not met her burden of proof in establishing a *prima facie* case of obviousness. “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” KSR International Co. v. Teleflex Inc., 82 USPQ2d at 1396 (2007). Seth provides no suggestion or motivation to make the specific modifications proposed by the Examiner, nor does the Examiner suggest any possible motivations. Applicant submits

that the rejected claims present a non-obvious and definite invention, and requests that the patentability of these claims be acknowledged without further delay.

2. Claims 4, 5, 26, 27, 35-38, 40, 41, 49 and 50 are rejected under 35 U.S.C. §103(a) as being obvious over Seth in view of U.S. Patent 5,871,969 to Akeno et al. ("Akeno"). Akeno is cited as showing particular fastener element features not found in Seth.

Of these claims, all but 35-38, 40 and 41 depend from one of the independent claims rejected as obvious over Seth alone and discussed above. As Akeno adds no teaching relevant to the deficiency of Seth with respect to these claims, Applicant submits that they are patentable at least as depending from a patentable base claim.

The lowermost extent of the tip of Akeno's engaging head corresponds to the uppermost extent of the crook (the lower surface of the head). Therefore, the measurement from the lowermost extent of the tip to the uppermost extent of the crook in Akeno's fastener element is zero, thereby yielding a ratio of crook height to entrance height of zero, which is not greater than 0.6. A ratio of other than zero could only be achieved by modifying Akeno to provide a head having a lower surface that extends outwardly and downwardly toward the base. The Examiner has not articulated any reasoning with a rational underpinning as to why it would have been obvious to a person of ordinary skill in the art to so modify Akeno.

Furthermore, these dependent claims present additional features *in combination with* the features recited in the independent claims, and therefore present additional recitations of the invention *as a whole* that are entitled to a proper and rigorous obviousness analysis that is not based on improper reliance on unscaled drawings and contrived explanations of hindsight motivation.

For example, in the rejection of claims 4, 26, and 49, the unscaled FIG. 4B of Akeno is improperly cited as disclosing a fastener element with an upper well height, measured perpendicularly from the base, of at least about 70 percent of the overall height of one of the two oppositely directed heads. However, "it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." Hockerson-Halberstadt, Inc. v. Avia Grp. Int'l,

222 F.3d 951, 956 (Fed.Cir.2000). As a result, the figures of Akeno cannot be relied upon to show particular ratios that require the measurement of the height of the "V" or the overall height of the fastener element in Akeno. Furthermore, the suggestion that the fastener element designer of mere ordinary skill at the time of the invention would have modified the combination of fastener element features recited in the base claims to also include this particularly large well height, simply to reduce material and improve head flexibility, mistakenly assumes that increased head flexibility is always a desirable characteristic in a fastener element (although it works against peel strength).

Similarly, the rejection of claims 5, 27, and 50 cites the unscaled FIG. 4B of Akeno as showing a fastener element with overall length at least 1.8 times its overall height. However, "proportions of features in a drawing are not evidence of actual proportions when drawings are not to scale." MPEP 2125. Therefore, Akeno fails to disclose or suggest a fastener element having an overall length between opposite extents of oppositely-directed heads, measured parallel to the base, of at least 1.8 times the overall height of the fastener element, and no *prima facie* case of obviousness has been made. Furthermore, the statement that "Akeno teaches that the use of a fastener element that has a length equal to almost double the height of the fastener is well known in the art to provide a fastener element with adequate strength, peeling resistance, high rate of engagement and good durability" is simply false. There is nothing in Akeno that associates having a length almost double the height with any of these properties, or provides any guidance as to why one would want such a length/height ratio in a fastener element.

Regarding claims 35-30 and 40, Seth and Akeno, either in combination or separately, fail to disclose a fastener having a bulk aspect, defined as a ratio of the product of an overall length (L) of the fastener element, measured parallel to the sheet-form base in the engagement direction above an elevation of the tip, and fastener element thickness (T), measured parallel to the sheet-form base and the engagement direction at the elevation of the tip, to an overall height (H) of the fastener element, measured perpendicular to the sheet-form base, of more than 0.020 inch (0.51 mm). ($LT/H > 0.02 \text{ in}$). The Examiner argues that such a fastener element would have been obvious in view of Akeno's disclosure of a fastener element having a length (L) equal to almost

twice the height (H) of the fastener (e.g., $L=2H$), hypothesizing that if one were to give Seth's fastener element the L/H ratio mistakenly presumed to be taught by Akeno, that the resulting product would have a bulk aspect of more than 0.020 inch. However, such an analysis is not a proper evaluation of obviousness, and is also based upon an improper scaling of the Akeno drawings, as discussed above. Neither Akeno nor Seth consider any relationship between the three dimensions of length (L), thickness (T), and height (H) of a fastener element, let alone the unique relationship defined as a bulk aspect claimed by the Applicant. Furthermore, neither reference recognizes the benefits realized by a fastener element having such a bulk aspect, nor provides any teaching that would have led one of mere ordinary skill toward the claimed configuration.

3. Claim 21 is rejected under 35 U.S.C. §103(a) as being obvious over Seth in view of U.S. Patent 6,248,419 to Kennedy et al. ("Kennedy"). Kennedy is cited as teaching laminating a hook fastener product to a backing material. However, As Kennedy adds no teaching relevant to the deficiency of Seth with respect to claim 1, Applicant submits that this claim is patentable at least as depending from a patentable base claim.
4. Claim 22 is rejected under 35 U.S.C. §103(a) as being obvious over Seth in view of U.S. Patent Application Publication US 2004/0068848 A1 to Ausen et al. ("Ausen"). Ausen is cited as teaching a particular fastener element density. However, As Ausen adds no teaching relevant to the deficiency of Seth with respect to claim 1, Applicant submits that this claim is patentable at least as depending from a patentable base claim.
5. Claims 1-3, 8-16, 22-25, 30, 31, 46-48, 52 and 56 are rejected under 35 U.S.C. §103(a) as being obvious over Ausen. This rejection is in many respects identical to the rejection of claims as obvious over Seth, discussed above, in that in each case the Examiner takes a reference that is silent as to the claimed ratio of crook height to entrance height, but concludes that it would have been obvious to alter the prior art fastener element shape to provide such a ratio. In this case, there is not even a proposed reason stated for doing so, the rejection relying solely on the unsupported conclusion that changing a dimension *would have* resulted in such a structure.

Like Seth, Ausen fails to disclose or suggest a fastener element having a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height, measured perpendicular to the sheet-form base below a lowermost extent of the tip, that is greater than 0.6.

In response, Applicant repeats the remarks made above with respect to the §103 rejection over Seth, as applicable also with respect to Ausen, and that would also be applicable to any other reference that shows a fastener element not having the noted characteristic and having no teaching that would have led someone of mere ordinary skill toward the invention. Without such a showing of some reason for making a proposed modification to a prior art shape, analysis that concludes with a finding of obviousness would just as inappropriately conclude that any shape is obvious over any other, through a series of calculated dimensional changes. Such an analysis does not comport with 35 U.S.C. §103. For at least the reasons explained above, Applicant respectfully maintains that all claims are patentable over the cited art of record, and requests a prompt acknowledgement of patentability.

CONCLUSION

The attorney of record below invites the Examiner to call with any questions regarding this matter, so that we can continue to advance the prosecution of this matter.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reason for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to amendment.

No charges are believed due. However, if any fees are due, they are being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account

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Respectfully submitted,

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